

CXPS-E103

Standard 48Vdc Power System



CXPS-E103 Power System

- > Integrated 48V, 166A power system package
- > Ultra compact, high density design utilizing standard plug-in circuit breakers
- > High efficiency design for reduced operating expenses
- > High temperature rated, fan-cooled design for harsh outdoor installations
- > Wide range AC input and IEC line cords for multiple AC services

Cordex High-Performance (HP) rectifiers make a proven, reliable platform even better, with significant advancements in efficiency and performance. Featuring a compact, fan-cooled design, HP rectifiers open the possibility to wider ranges of applications and immediate OPEX/CAPEX savings, reducing total cost of ownership and impact on the environment.

The CXPS-E103 is the ideal solution for small to medium 48Vdc applications, providing up to 166 Amps output. With universal 19/23" mounting, high temperature operation, compact 3RU height and 15" depth, it is a perfect solution for a wide variety of installation scenarios including those in harsh, outdoor environments.

The distribution center provides (10) plug-in breaker positions for load distribution, (2) battery breaker positions, integrated shunt and low voltage battery disconnect (LVBD). With the shunt positioned to measure battery current, a higher accuracy of battery float current is achieved while the system is able to report load current by calculation.

The modular CXCM1 controller includes a web server, providing easy setup via local or remote IP access, using a standard Windows Internet Explorer browser. The CXCM1 also includes LED indicators and an LCD screen for voltage and current display.

The CXPS-E103 can be easily integrated into customer provided relay racks or enclosures or can be ordered factory-installed into various Alpha relay rack configurations, including systems with pre-wired battery trays.

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Part Number 0540571

Features

Rectifier: Up to 4x 48V-2.0kW rectifier positions
 Distribution: 10x load breaker positions
 (breaker, plug-in style)
 2x battery breaker positions
 (breaker, plug-in style)
 225A Low voltage disconnect
 200A Battery shunt
 Controller: CXCi+ Modular controller (included)

Electrical

Input:
 Voltage: 176 to 312Vac (nominal)
 90 to 176Vac (de-rated O/P power)
 Current: 7.5A max (176 to 300Vac) per module
 6.0A max (90 to 176Vac) per module
 Frequency: 45 to 66Hz
 Efficiency: >94% (50-100% load @ nominal voltage)
 Power factor: >.99

Output:
 Current:
 System: 166A max @ 48Vdc (nominal I/P)
 104A max @ 48Vdc (120Vac)
 Rectifier: 41.7A max @ 48Vdc (nominal I/P)
 26A max @ 48Vdc (120Vac)
 (de-rated linearly to 18.7A @ 90Vac)

Power:
 System: 8000W max @ nominal I/P
 5000W @ 120Vac
 Rectifier: 2000W max @ nominal I/P
 1250W @ 120Vac
 (subject to de-rating below 120Vac)



Mechanical

Dimensions:
 mm: 133H x 438W x 381D
 inches: 5.25H x 17.24W x 15D
 Weight:
 System: 21.3kg (47lbs)
 Rectifier: 2.8kg (6.2lbs) each
 Mounting: 19/23" universal mount (center)

Connections:
 Load breaker: 10x sets, 1/4"-20 studs on 3/8" centers
 Battery breaker: 2x sets, 1/4"-20 studs on 3/8" centers
 Return bar: 12x sets, 10-32 studs on 3/8" centers
 Alarm: Screw terminal 1.31mm² to 0.128mm²
 (#16 to #26 AWG)
 Access: Front access for operation and maintenance

Environmental

Temperature: -40 to 65°C (-40 to 149°F)
 -40 to 75°C (-40 to 167°F) de-rated output
 Humidity: 0 to 95% RH non-condensing
 Elevation: -500 to 2800m; to 4000m with temperature
 de-rated to 40°C (-1640 feet to 9186 feet; to
 13124ft with temperature de-rated to 104°F)

Related Components

010-622-20	Cordex CXRF 48-2.0kW Rectifier Module
7400232-001	Spare CXCi+ Controller
747-095-20-072	Temperature sensor assembly 12 ft, 1/4" lug
747-095-20-075	Temperature sensor assembly 12 ft, 3/8" lug

Load breakers:
 Plug-in mid trip (consult factory)

Battery breakers:
 Plug-in series trip (consult factory)